Multilateral Initiative on Malaria

Meeting on Antimalarial Drug Resistance and Policies: Opportunities for Concerted Action by Funding Agencies

> Noga Hilton Hotel Geneva 14th - 15th May 1998

I. Outline of Areas Relevant to Remit of Meeting

The meeting is intended to provide a forum to discuss opportunities for improved integration of research, policy and implementation activities in the following general areas: (NB this list is intended to map out areas of interest and not to be a definitive summary of all relevant issues)

Implementation of treatment recommendations

- 1. Selection of appropriate drug policies according to particular epidemiological situation
- 2. Managing the introduction of changes to recommendations (informing and motivating key players)
- 3. Drug procurement and distribution
- 4. Human and financial resources
- 5. Quality control of antimalarial drugs
- 6. Economics of introducing changes to drug treatment recommendations
- 7. Health systems context (hospitals, local shops, traditional healers and private practitioners)
- 8. Health seeking behaviour
- 9. Urban versus rural issues
- 10. Children versus adults
- 11. Monitoring of drug resistance
- 12. Adverse reaction monitoring
- 13. Managing the introduction of newly registered antimalarial drugs
- 14. Lessons from other regions (eg lessons from Asia for Africa)

Policy Development

Regular review of scientific findings and epidemiological data to develop regional and country recommendations on:

- 1. Criteria for switching first line drug treatments
- 2. Choice of replacement first line drugs (sequencing of drugs)
- 3. Strategies for use of drug combinations and drug rotation to delay the emergence of resistance
- 4. Treatment and prophylaxis regimens: dosage, route of administration of drug/s

Research to inform drug policies

- 1. Evaluation of rational drug combinations for delaying the emergence of resistance
- 2. Evaluation of drug rotation strategies
- 3. Optimising drug dosages and delivery routes
- 4. Studies of drug toxicity
- 5. Evaluation of the effectiveness of malaria treatment in communities: use of local shops, traditional healers and private practitioners
- 6. Studies of antimalarials in pregnancy
- 7. The appropriateness of malaria prophylaxis in communities
- 8. Epidemiological methodology for monitoring of drug resistance (sampling strategies)

- 9. In vitro techniques for detection of drug resistance and correlation with therapeutic failures
- 10. Biochemistry of antimalarial drug action/parasite resistance
- 11. Molecular methods for detection of resistance genes

II. The Key Objectives and Anticipated Outcomes of the Meeting

Introduction

The problem of emerging antimalarial drug resistance in Africa has been prioritised for concerted action under the Multilateral Initiative on Malaria (see MIM meeting reports, Papers 3 & 4). The immense implications of this problem for malaria control efforts has stimulated considerable activity by a range of sponsoring organisations. These various agencies have different contributions to make towards addressing the overall problem and it has become evident that there would be considerable benefit to be derived from promoting increased integration of their activities, and developing clear plans for concerted action to address outstanding needs.

As the nominated co-ordinator of the MIM for this year, the Wellcome Trust has agreed to convene a meeting to bring together relevant agencies in order to work towards greater integration of the full range of research, policy and implementation activities relating to antimalarial drug usage, and to identify any critical gaps not encompassed by current programmes. The meeting will also provide a forum to explore research-development interactions on a broader basis.

Anticipated outcomes

The purpose of the meeting is to assess the main challenges posed by the threat of emerging antimalarial drug resistance and to review current activities supported by various organisations. Through this process the meeting will aim to:

- 1. Increase the awareness of agencies to each other's activities
- 2. Define current interrelations between activities, and examine the roles and responsibilities of the different organisations
- 3. Optimise the integration of ongoing and planned activities by:
- i) Identifying areas of overlap that might benefit from a collaborative effort
- ii) Sequencing planned activities for maximal impact
- iii) Effectively linking together related activities by establishing appropriate communication channels between agencies
- 4. Identify activities that are not adequately covered by current programmes
- 5. Propose a framework for effective approaches to address identified gaps and constraints (agree lead organisation/s and timetable).
- 6. Obtain agreement on a plan to take forward the action points arising from the meeting.

Background

The focus of the meeting will be on the interface between research and implementation, including the processes for a) maximising the impact of current research, and b) defining further research necessary to formulate policies for antimalarial drug usage, and to develop standardised, effective methods for monitoring drug resistance. To this end, the meeting will include representation from a range of different organisations involved in malaria research and control activities.

The meeting will aim to summarise in broad terms the research and implementation programmes

supported by different organisations that are of critical importance to developing and applying a rational approach to deal with the challenge of emerging antimalarial drug resistance. This overview of activities will allow identification of areas of overlapping interest between agencies, gaps in activities and constraints. It will also form a basis for considering opportunities for more effective harmonisation of activities. In this context, discussions will explore mechanisms for review of scientific advances and for policy development; communications links between research communities, policy makers and implementors; and mechanisms for orientating research agendas to on-the-ground needs in malaria endemic countries. The type of issues considered to fall within the remit of the meeting are set out in Paper 2.

The meeting has been constituted to focus on broad programmatic issues, such as the contributions and responsibilities of the different players in the transition from research through to policies and implementation, and the integration of these activities. It will not be a forum to prioritise specific research questions or to formulate policies and recommendations for deployment and use of antimalarials. However, it is anticipated that further workshops or meetings will be organised to tackle specific research or policy development issues in depth, where they are not adequately being addressed by existing activities.

The meeting will also contribute towards addressing a further agreed priority of the Multilateral Initiative on Malaria: to promote creative interactions between the research and development communities.